

REMARKS

The Office Action dated July 14, 2006 has been received and carefully noted. The following remarks are submitted as a full and complete response thereto.

Claims 1-10, 12-26, and 28-33 are currently pending in the application. Claims 12-16, 18-26, 28, 29 and 31-33 have been allowed. Applicants wish to thank the Examiner for the allowance of these claims. Claims 1-10, 17 and 30 are respectfully submitted for consideration.

Claim 17 was objected to as being dependent upon a rejected base claim. Claim 17 was amended, in the Amendment filed on April 6, 2006, to be dependent upon claim 12 instead of claim 11. Claim 12 was indicated as being allowed. Accordingly, Applicants respectfully submit that the objection is rendered moot and claim 17 should be allowed.

Claim 30 was objected as being dependent upon a rejected base claim. As noted in the Office Action, claim 29, upon which claim 30 is dependent, has been amended to overcome the §112 rejection. Additionally, claim 29 was indicated as being allowed. Therefore, Applicants respectfully submit that the objection is rendered moot and claim 30 should be allowed.

Claims 1-11 were rejected under 35 U.S.C. §102(e) as being anticipated by Headrick (U.S. Patent No. 5,724,358). Applicants note that claim 11 has been canceled.

However, Applicants respectfully traverse the rejection of claims 1-10 for at least the following reasons.

Claim 1, upon which claims 2-10 are dependent, recites a network switch comprising at least one port data port interface, a first memory, a second memory, and a memory management unit. The memory management unit is in connection with the at least one data port interface, the first memory, and the second memory. The memory management unit receives data from the at least one data port interface, determines if the data is to be stored in one of the first memory or the second memory, stores the data in one of the first memory or the second memory as a linked list, retrieves the data from one of the first memory or the second memory, and forwards the data for egress. The memory management unit further includes a communication channel and a data input section in connection with the communication channel. The data input section further includes at least one cell accumulation buffer and a slot assembly unit, the slot assembly unit is configured to receive cells from the at least one cell accumulation buffer and package the received cells into cell slots to be stored in the second memory.

As will be discussed below, Headrick fails to disclose or suggest all of the elements of the claims, and therefore fails to provide the features discussed above.

Headrick discloses a high speed packet-switched digital switch that has a switch with a shared memory architecture. The switch may have a memory controller including an output queue for each output port. Each output queue includes a plurality of priority level sub-queues for routing data packets having different priority levels. The memory

controller routes and buffers data packets on a per port, per priority level basis. The data packet has a header portion identifying one output port destination and a level of priority of the data within the packet. A buffer, shared by the output ports, stores the data packet in a selected buffer location based on the output port destination and priority level of the data packet. The data packets are output to the output ports in priority order.

Applicants respectfully submit that Headrick fails to disclose or suggest all of the elements of claim 1. For example, Headrick fails to disclose or suggest that “the data input section further comprises at least one cell accumulation buffer and a slot assembly unit, the slot assembly unit being configured to receive cells from the at least one cell accumulation buffer and package the received cells into cell slots to be stored in the second memory,” as recited in claim 1.

In the response to arguments section, the Office Action appears to take the position that Figure 7 of Headrick discloses the elements of present claim 1. The Office Action states that the data paths of Headrick correspond to the cell accumulation buffer of the present invention, and that the Cell Buffer Memory 174 of Headrick corresponds to the slot assembly unit of the present invention. Applicants respectfully disagree. Claim 1 specifically recites that the slot assembly unit is configured to receive cells from the at least one cell accumulation buffer and package the received cells into cell slots to be stored in the second memory.

The cell buffer memory 174 of Headrick does not include the features of the claimed slot assembly unit discussed above. Rather, Headrick only discloses that the cell

buffer memory 174 “is organized as a plurality of addressable memory locations. These memory locations within the cell buffer memory are controlled by the memory managers which allocate free memory locations within the cell buffer memory using freelist memory 176” (Headrick, Column 7, lines 8-13).

Therefore, Headrick discloses that the cell buffer memory 174 is a memory including a plurality of free memory locations that may store information. Headrick fails to disclose or suggest that the cell buffer memory 174 packages the received cells into cell slots to be stored in the second memory, as recited in the present claims.

The Office Action also cites Column 7, lines 49-67 and Column 8, lines 1-10 as disclosing the features of the slot assembly unit of the present invention. However, these sections merely describe that “it is determined whether or not the cell will be accepted by the cell buffer memory. The details of the cell acceptance method, in accordance with the invention, will be described in more detail below. If the cell is not accepted, then the cell is dropped in Step 234. On the other hand, if the cell is accepted into the cell buffer memory, then, in Step 236, the cell is stored in the memory and the pointers in the pointer memories are updated” (Headrick, Column 7, line 67 – Column 8, line 8). Consequently, Headrick does not disclose or suggest that the cell buffer memory, which the Office Action argues corresponds to the slot assembly unit, is configured to receive cells from the at least one cell accumulation buffer and package the received cells into cell slots to be stored in the second memory. Headrick merely discloses that the cell buffer memory determines whether to accept a cell and stores the cell therein if it is accepted. The cell

buffer memory does not package the received cells into cell slots to be stored in a second memory. In fact, Headrick contains no mention of a second memory.

Accordingly, Applicants respectfully assert that the cell buffer memory of Headrick does not correspond to the slot assembly unit of the present invention. Therefore, for at least the reasons discussed above, Headrick fails to disclose or suggest that “the data input section further comprises at least one cell accumulation buffer and a slot assembly unit, the slot assembly unit being configured to receive cells from the at least one cell accumulation buffer and package the received cells into cell slots to be stored in the second memory,” as recited in claim 1. As such, Applicants respectfully submit that Headrick fails to disclose or suggest all of the elements of claim 1.

For at least the reasons discussed above, Applicants respectfully request that the rejection of claim 1 be withdrawn. Claims 2-10 are dependent upon claim 1. Therefore, claims 2-10 should be allowed for at least their dependence upon claim 1, and for the specific limitations recited therein.

Applicants respectfully submit that Headrick fails to disclose or suggest all of the elements of the claimed invention. These distinctions are more than sufficient to render the claimed invention unanticipated and unobvious. It is therefore respectfully requested that all of claims 1-10, 12-26 and 28-33 be allowed, and this application passed to issue.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by

telephone, the applicant's undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, the applicant respectfully petitions for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,



Majid S. AlBassam
Registration No. 54,749

Customer No. 32294
SQUIRE, SANDERS & DEMPSEY LLP
14TH Floor
8000 Towers Crescent Drive
Tysons Corner, Virginia 22182-2700
Telephone: 703-720-7800
Fax: 703-720-7802

MSA:jf